



19

PATENT

TECH CENTER 1600/2900

FEB 10 2003

RECEIVED

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Hateboer et al.

Serial No.: 09/549,463

Filed: April 14, 2000

For: RECOMBINANT PROTEIN
PRODUCTION IN A HUMAN CELL

Confirmation No.: 8657

Examiner: R. Mitra

Group Art Unit: 1653

Attorney Docket No.: 2578-4038.1US

CERTIFICATE OF MAILING

I hereby certify that this correspondence along with any attachments referred to or identified as being attached or enclosed is being deposited with the United States Postal Service as First Class Mail on the date of deposit shown below with sufficient postage and in an envelope addressed to the Commissioner for Patents, Washington, D.C. 20231.

January 30, 2003
Date

Betty Vowles
Signature

Betty Vowles
Name (Type/Print)

TRANSMITTAL OF FORMAL DRAWINGS

Commissioner for Patents
Washington, D.C. 20231

Sir:

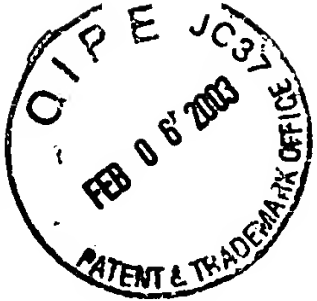
Attached please find the formal drawings for this application.

Respectfully submitted,

Andrew F. Nilles

Andrew F. Nilles
Registration No. 47,825
Attorney for Applicant(s)
TRASKBRITT, P.C.
P.O. Box 2550
Salt Lake City, Utah 84110-2550
Telephone: 801-532-1922

Date: January 30, 2003
AFN/bv
Document in ProLaw



TITLE: RECOMBINANT PROTEIN
PRODUCTION IN A HUMAN CELL

Inventor: Hateboer et al.

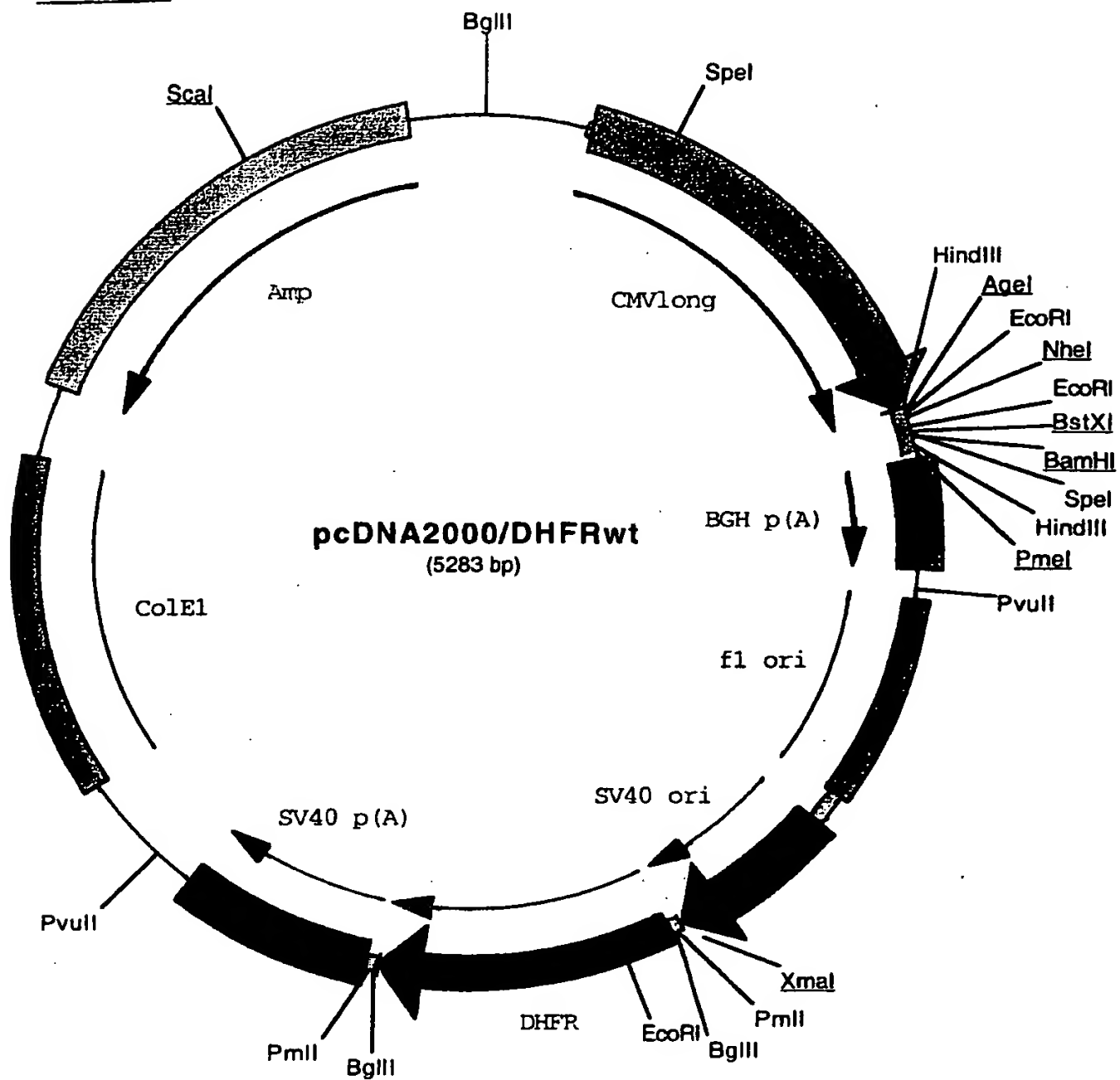
Serial No.: 09/549,463

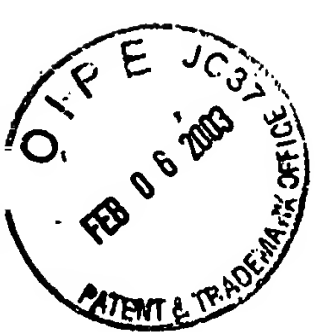
Docket No.: 2578-4038.1US

1/27

RECEIVED
FEB 10 2003
TECH CENTER 1600/2900

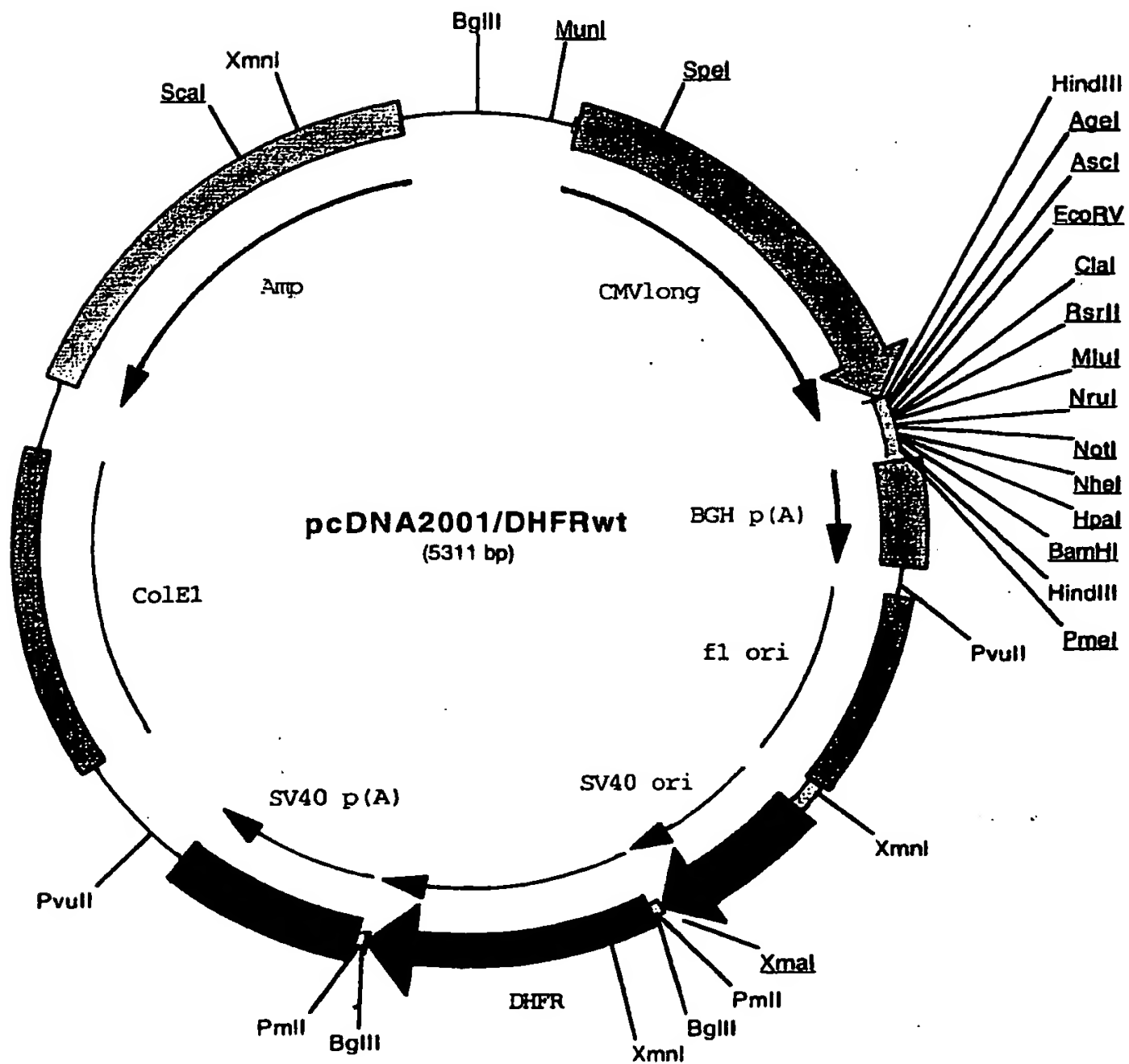
FIGURE 1

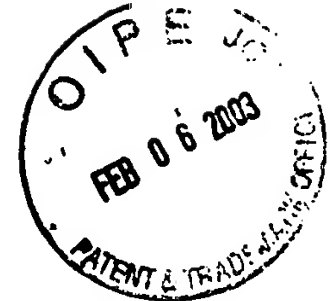




2/27

FIGURE 2





TITLE: RECOMBINANT PROTEIN
PRODUCTION IN A HUMAN CELL

Inventor: Hateboer et al.

Serial No.: 09/549,463

Docket No.: 2578-4038.1US

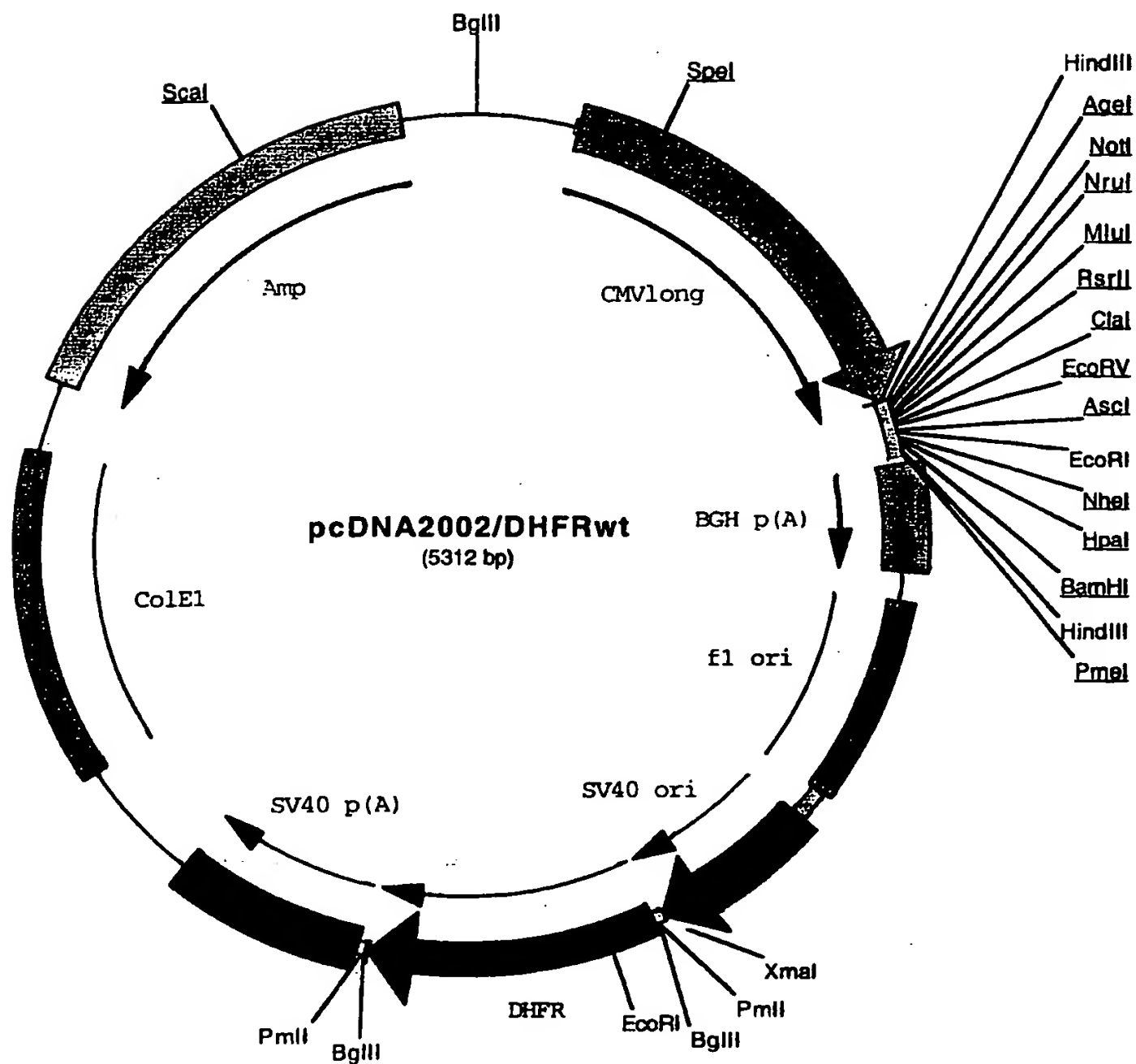
3/27

RECEIVED

FEB 10 2003

TECH CENTER 1600/2900

FIGURE 3





TITLE: RECOMBINANT PROTEIN
PRODUCTION IN A HUMAN CELL

Inventor: Hateboer et al.

Serial No.: 09/549,463

Docket No.: 2578-4038.1US

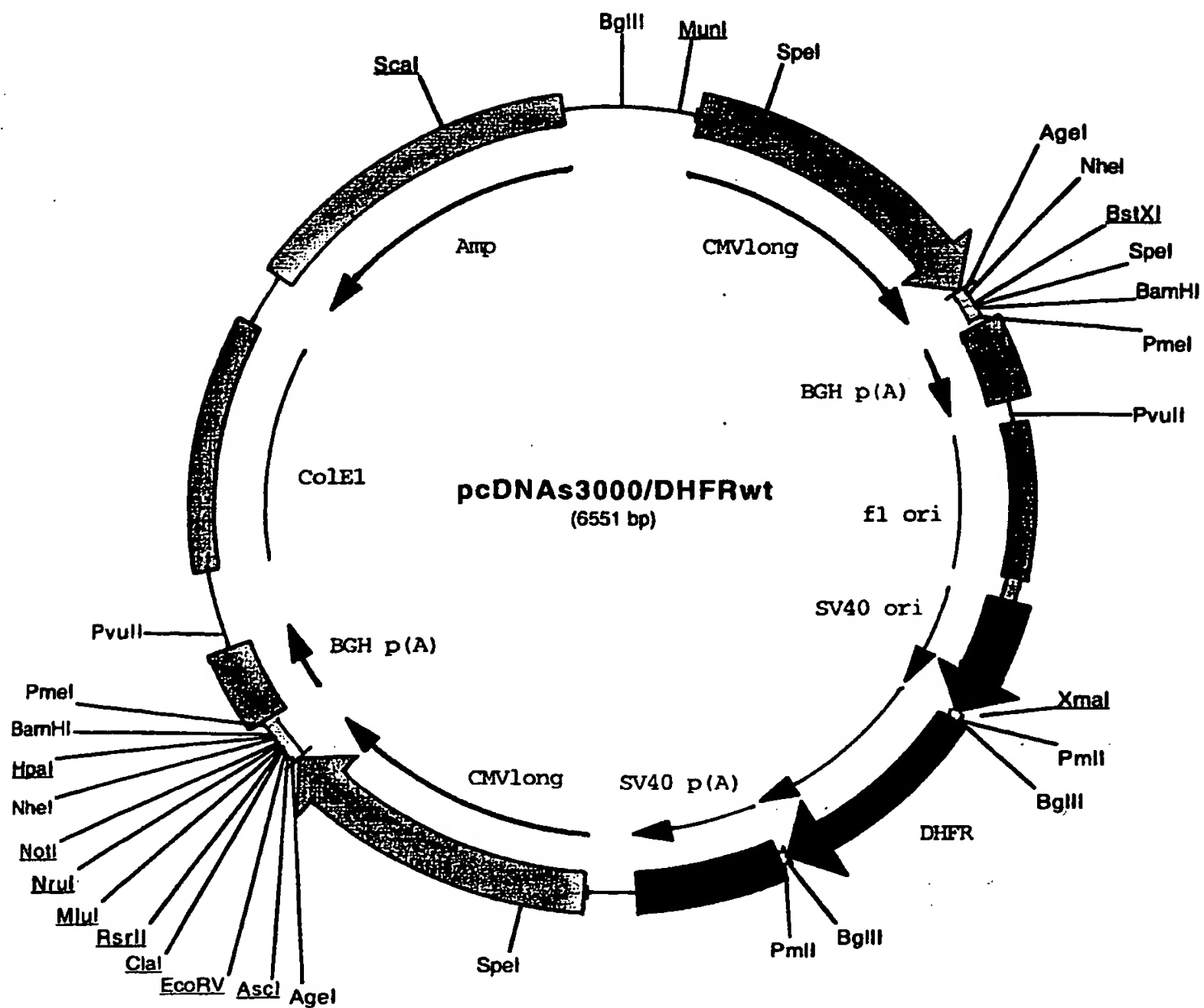
RECEIVED

FEB 10 2003

TECH CENTER 1600/2900

4/27

FIGURE 4





TITLE: RECOMBINANT PROTEIN
PRODUCTION IN A HUMAN CELL

Inventor: Hateboer et al.

Serial No.: 09/549,463

Docket No.: 2578-4038.1US

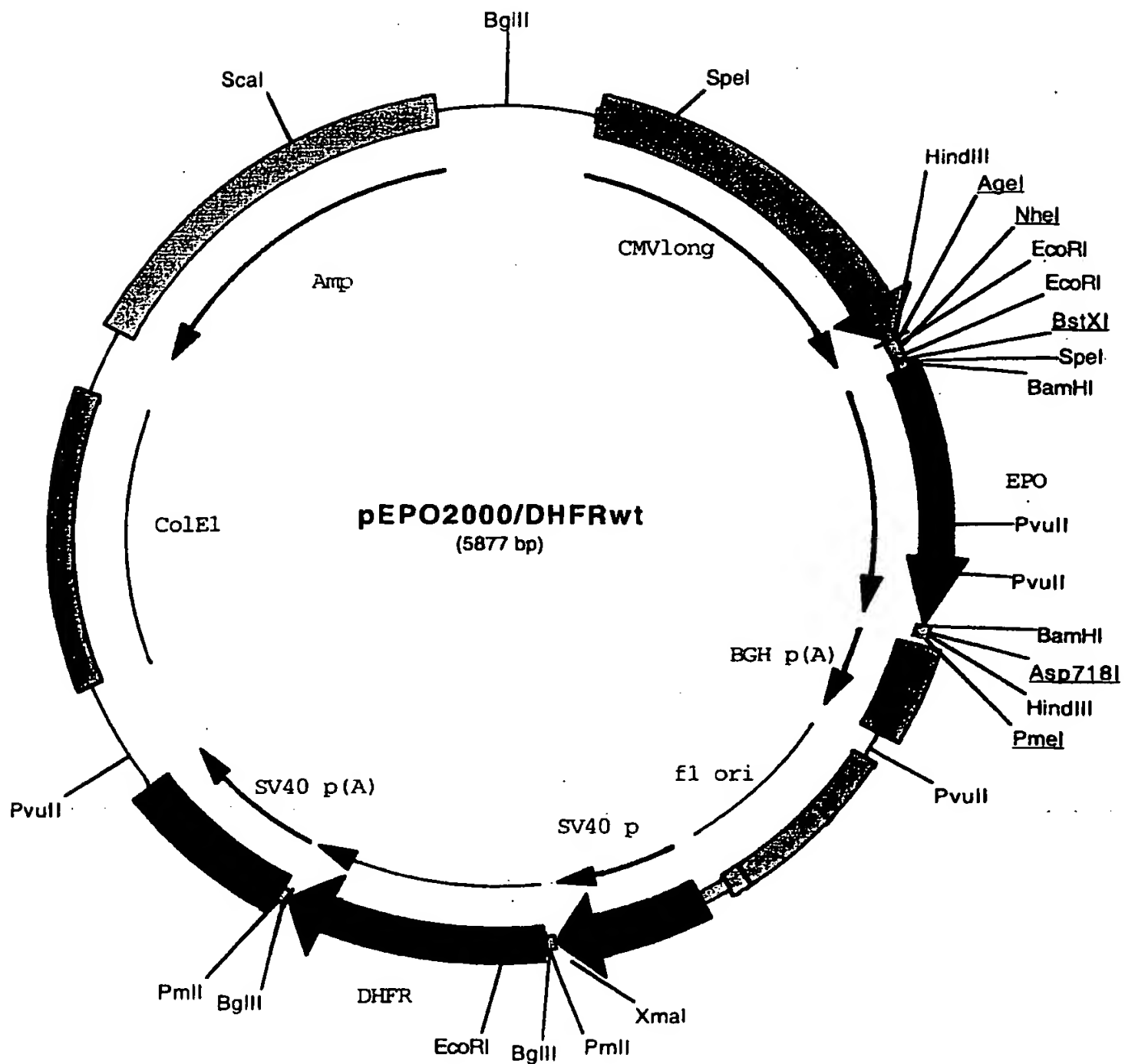
RECEIVED

FEB 10 2003

TECH CENTER 1600/2900

5/27

FIGURE 5





TITLE: RECOMBINANT PROTEIN
PRODUCTION IN A HUMAN CELL

Inventor: Hateboer et al.

Serial No.: 09/549,463

Docket No.: 2578-4038.1US

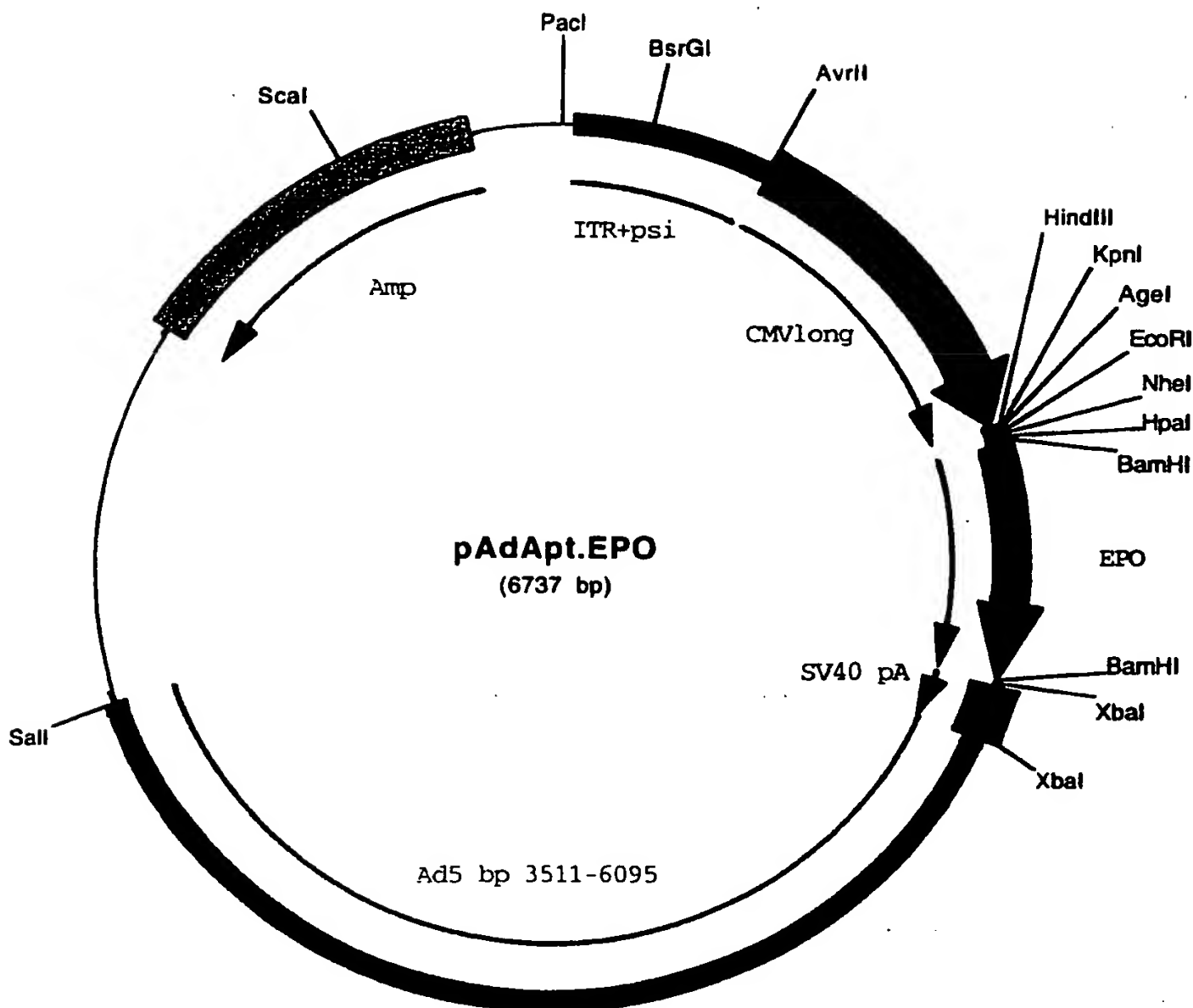
6/27

RECEIVED

FEB 10 2003

TECH CENTER 1600/2900

FIGURE 6



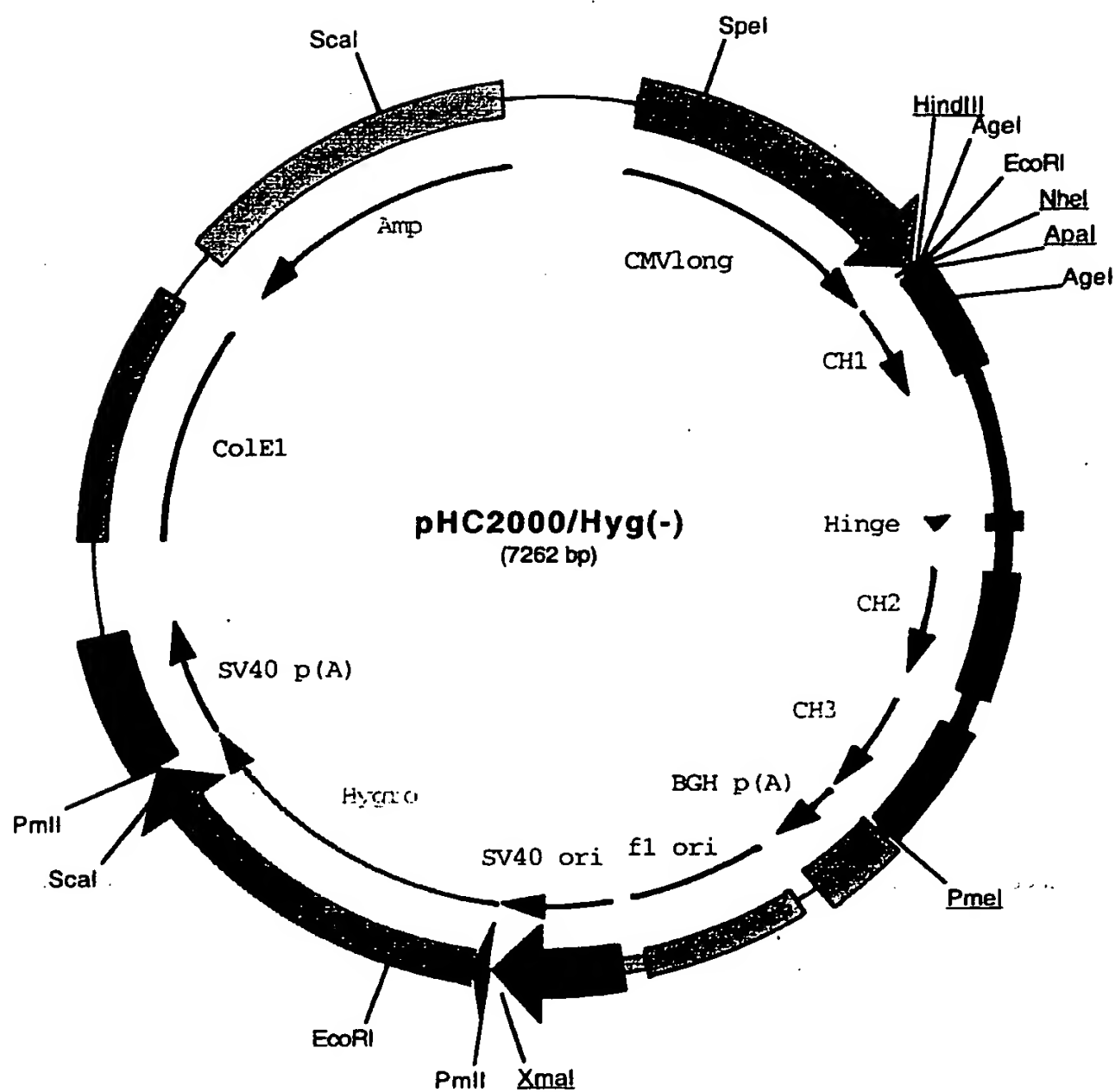


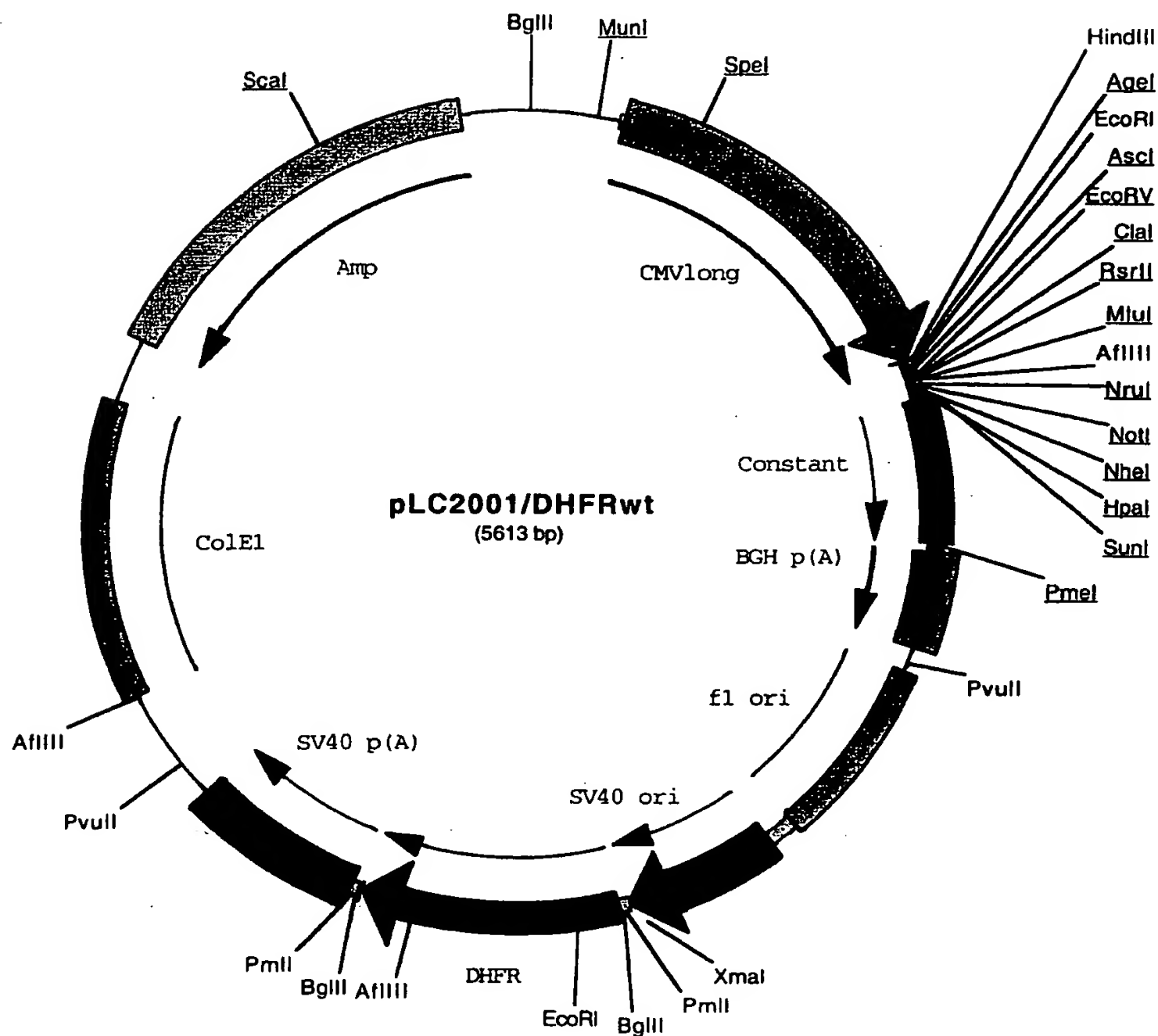
TITLE: RECOMBINANT PROTEIN
PRODUCTION IN A HUMAN CELL
Inventor: Hateboer et al.
Serial No.: 09/549,463
Docket No.: 2578-4038.1US

RECEIVED
FEB 10 2003
TECH CENTER 1600/2900

7/27

FIGURE 7



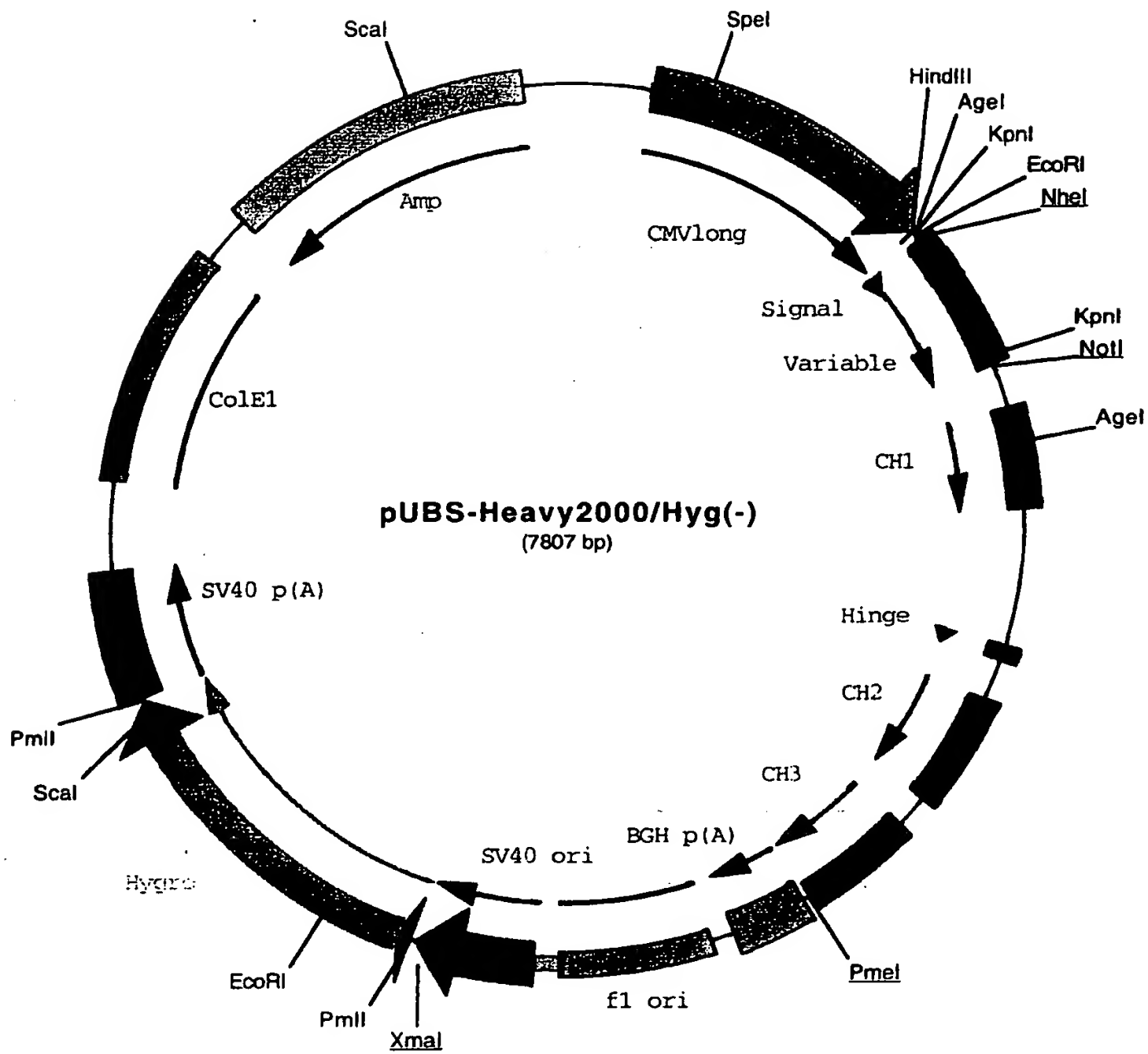




TITLE: RECOMBINANT PROTEIN
PRODUCTION IN A HUMAN CELL
Inventor: Hateboer et al.
Serial No.: 09/549,463
Docket No.: 2578-4038.1US

9/27

FIGURE 9





TITLE: RECOMBINANT PROTEIN
PRODUCTION IN A HUMAN CELL

Inventor: Hateboer et al.

Serial No.: 09/549,463

Docket No.: 2578-4038.1US

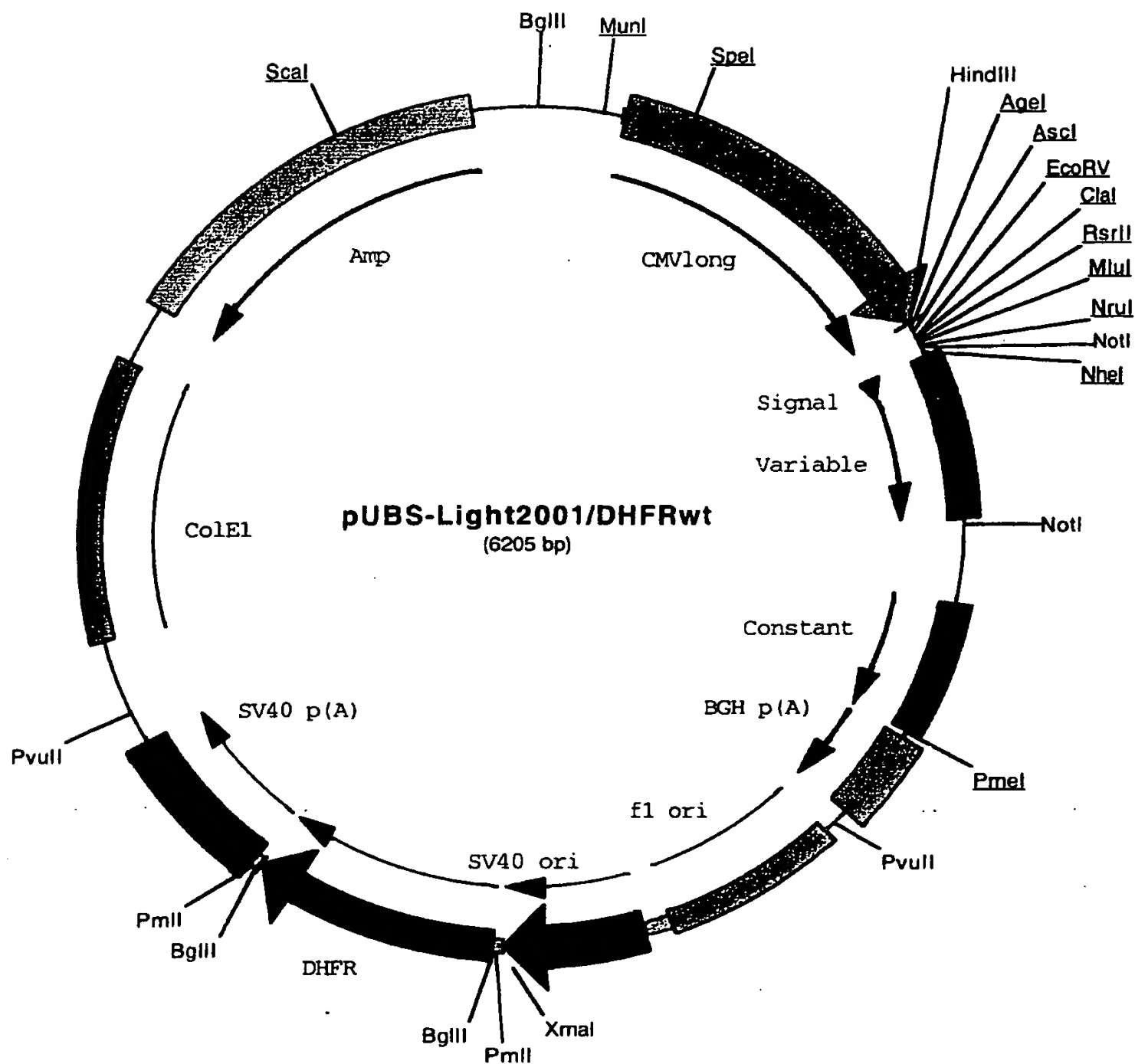
RECEIVED

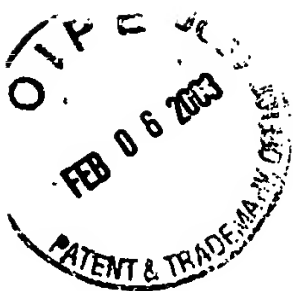
FEB 10 2003

TECH CENTER 1600/2900

10/27

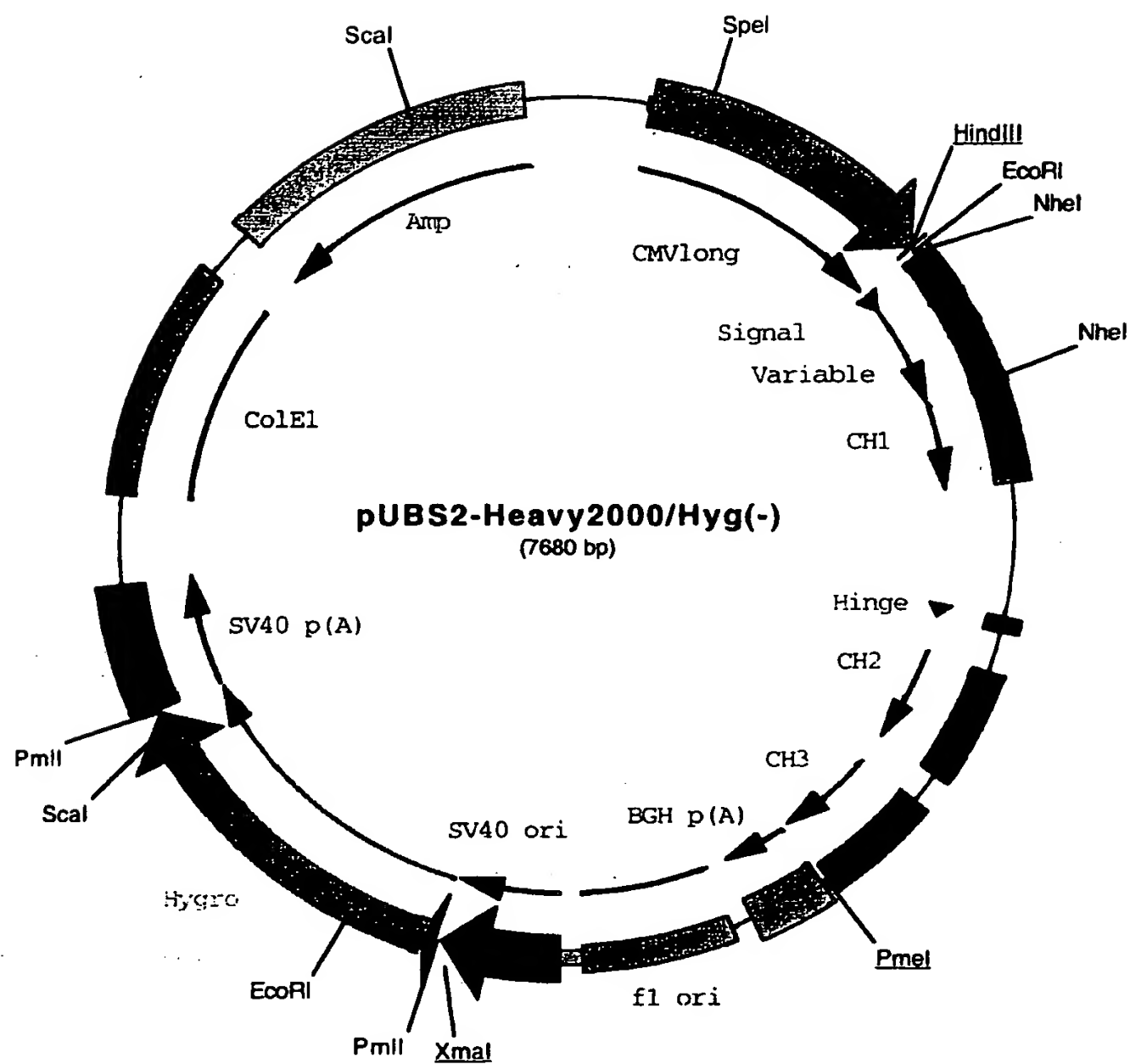
FIGURE 10

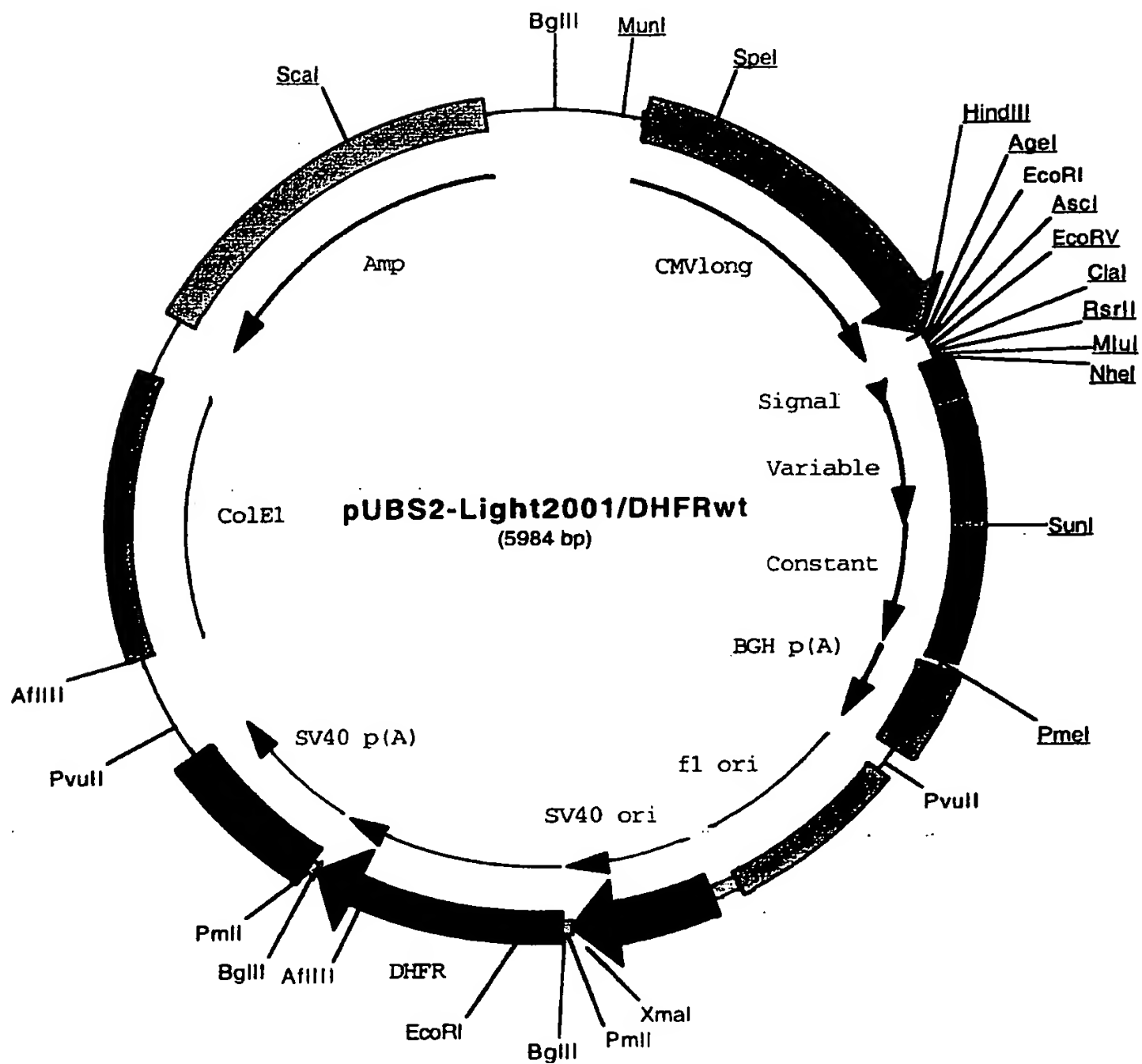


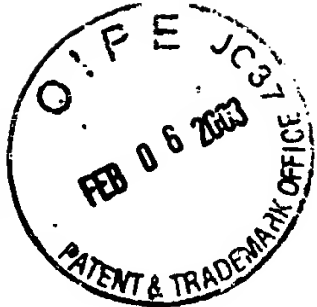


11/27

FIGURE 11







TITLE: RECOMBINANT PROTEIN
PRODUCTION IN A HUMAN CELL

Inventor: Hateboer et al.

Serial No.: 09/549,463

Docket No.: 2578-4038.1US

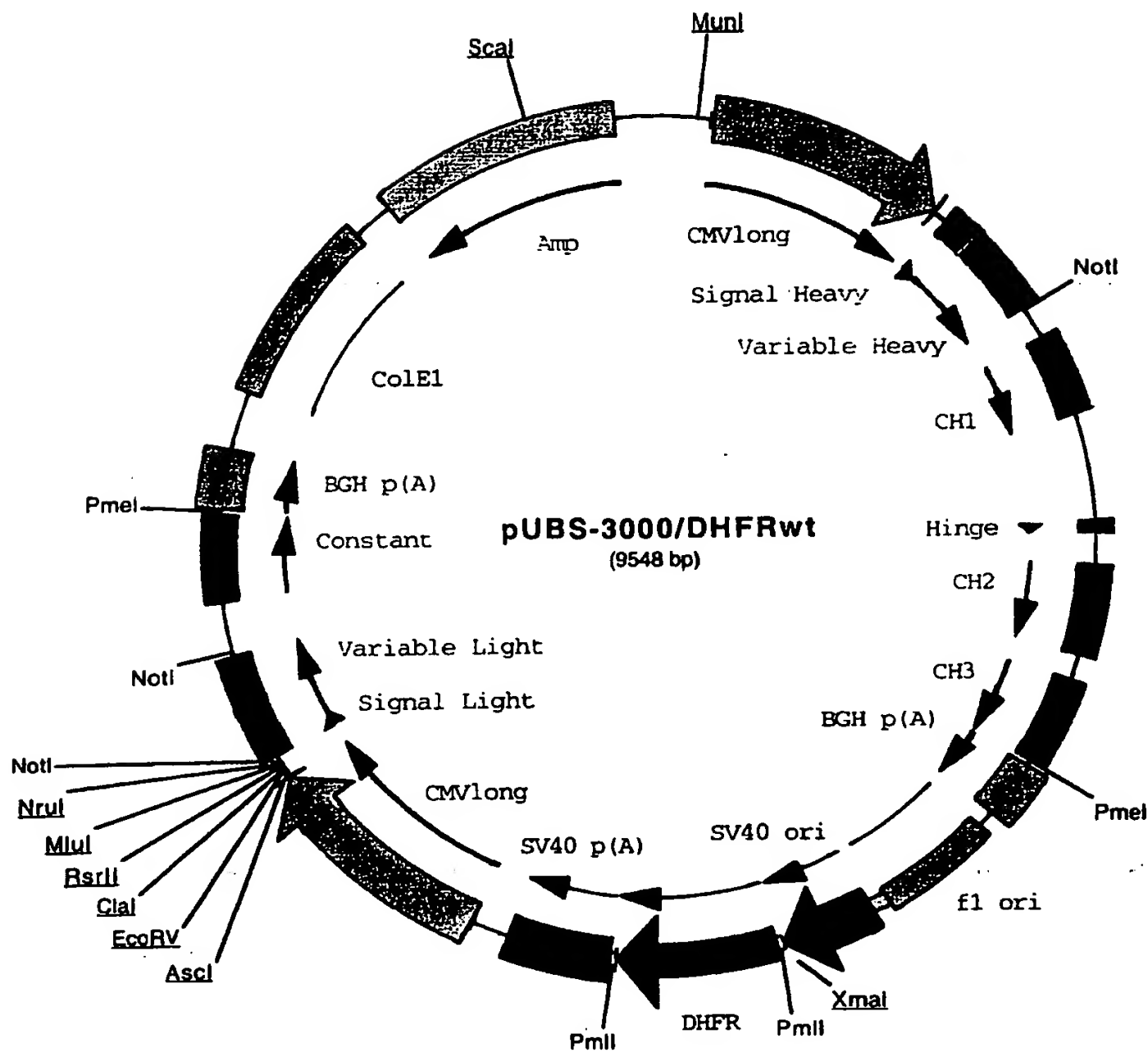
RECEIVED

FEB 10 2003

TECH CENTER 1600/2900

13/27

FIGURE 13





TITLE: RECOMBINANT PROTEIN
PRODUCTION IN A HUMAN CELL

Inventor: Hateboer et al.

Serial No.: 09/549,463

Docket No.: 2578-4038.1US

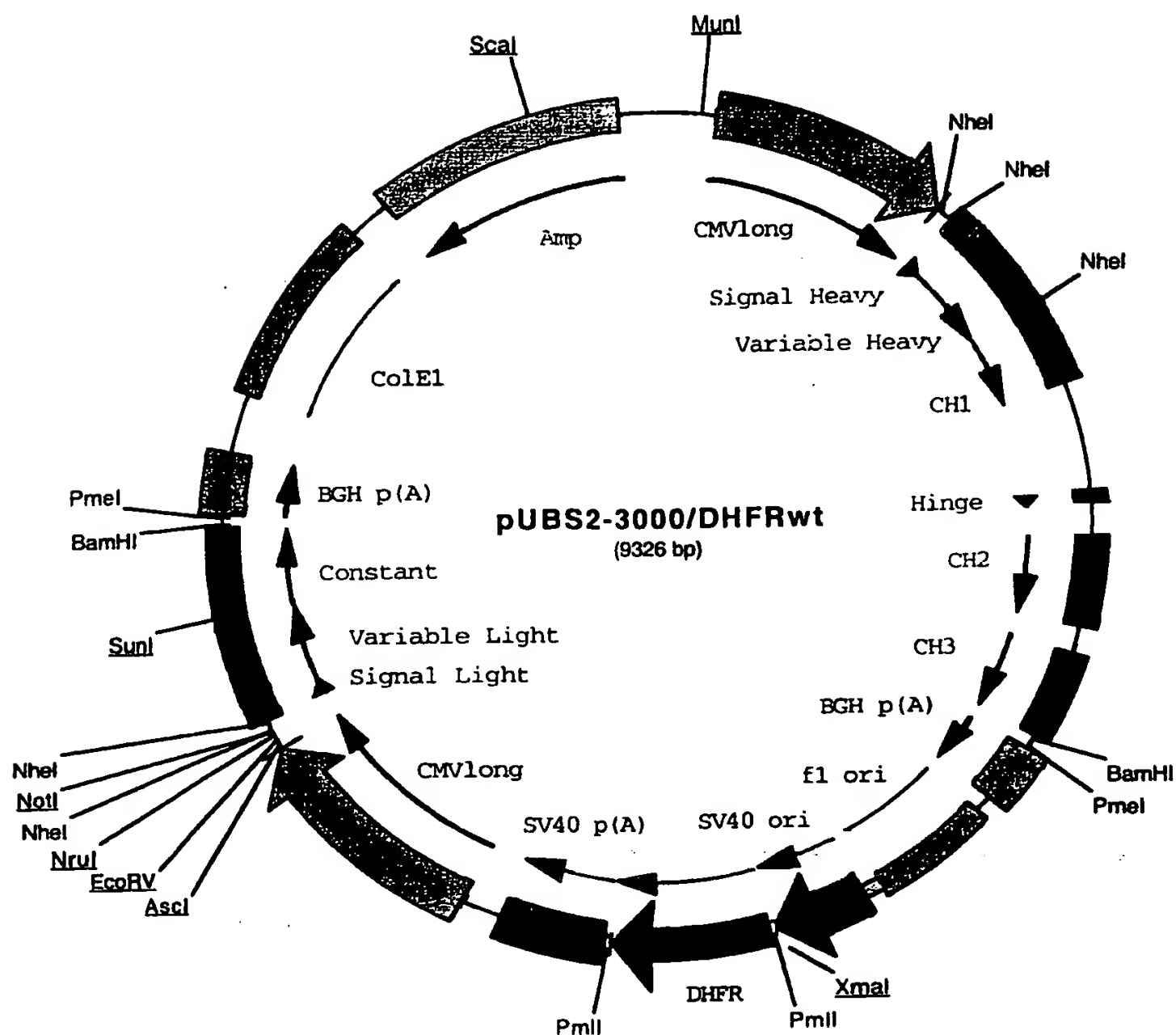
RECEIVED

FEB 10 2003

TECH CENTER 1600/2900

14/27

FIGURE 14



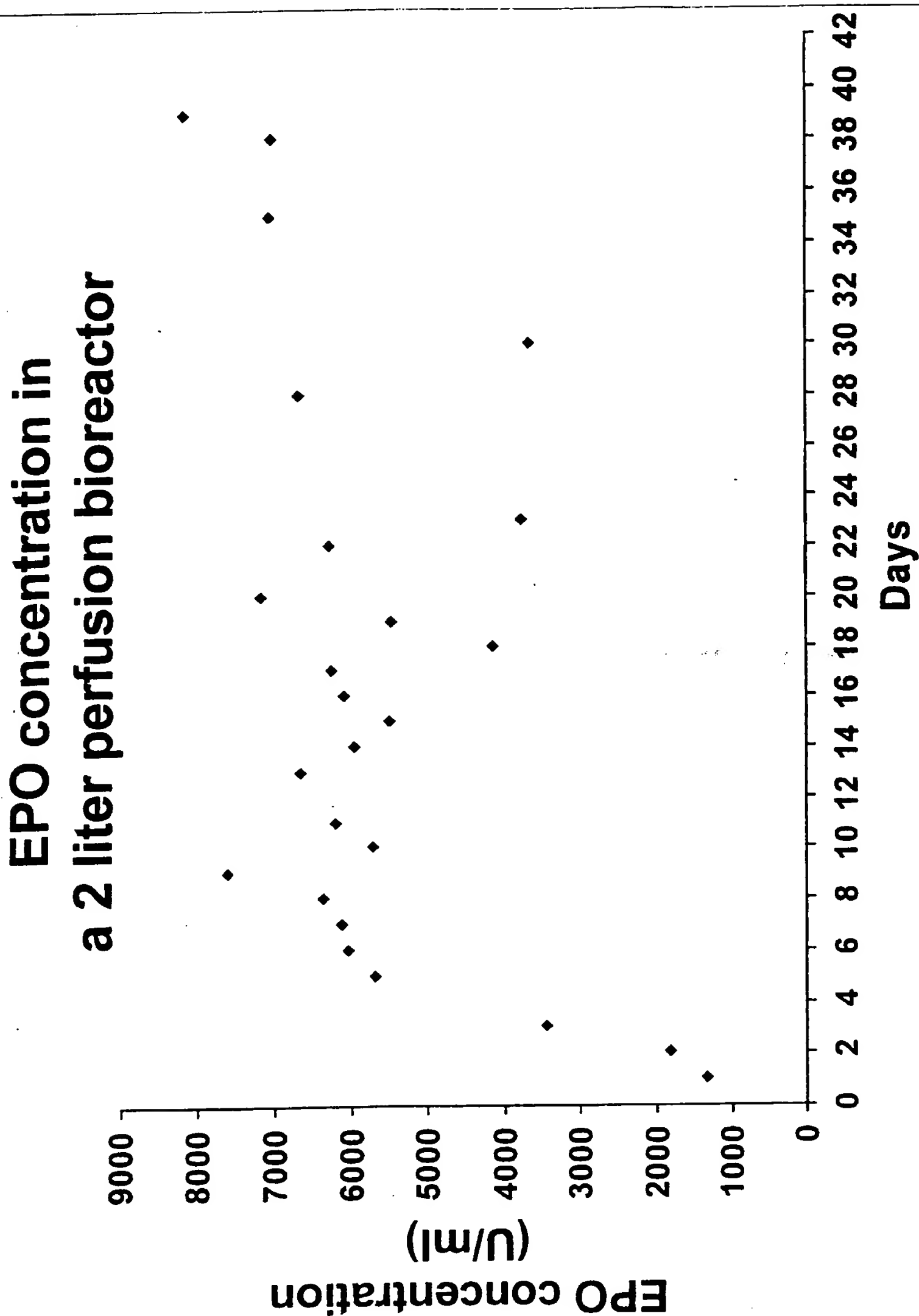


TITLE: RECOMBINANT PROTEIN
PRODUCTION IN A HUMAN CELL
Inventor: Hateboer et al.
Serial No.: 09/549,463
Docket No.: 2578-4038.1US

RECEIVED
FEB 10 2003
TECH CENTER 1600/2900

15/27

FIGURE 15





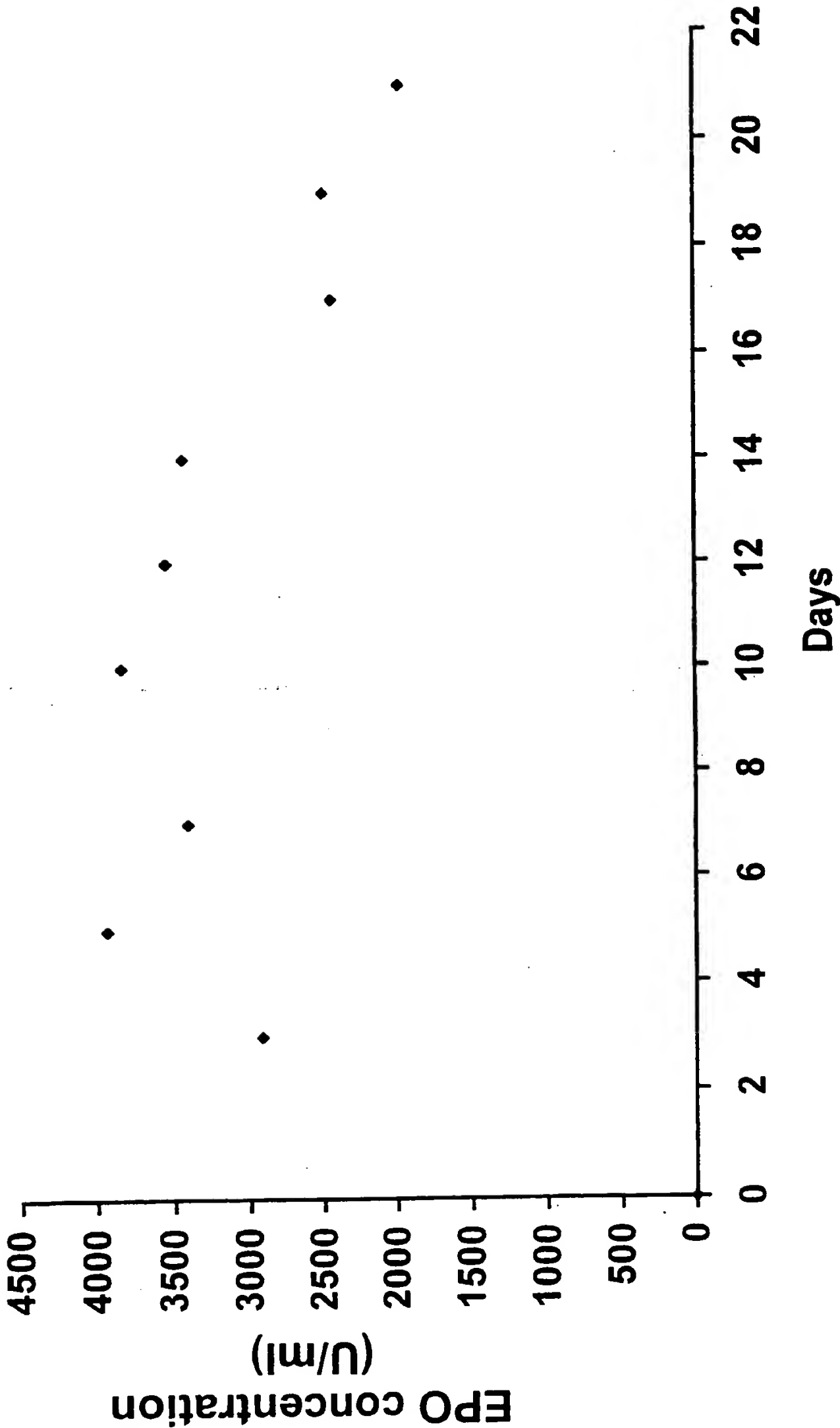
TITLE: RECOMBINANT PROTEIN
PRODUCTION IN A HUMAN CELL
Inventor: Hateboer et al.
Serial No.: 09/549,463
Docket No.: 2578-4038.1US

16/27

RECEIVED
FEB 10 2003
TECH CENTER 1600/2900

FIGURE 16

EPO concentration in
a 2 liter bioreactor (repeated batch)



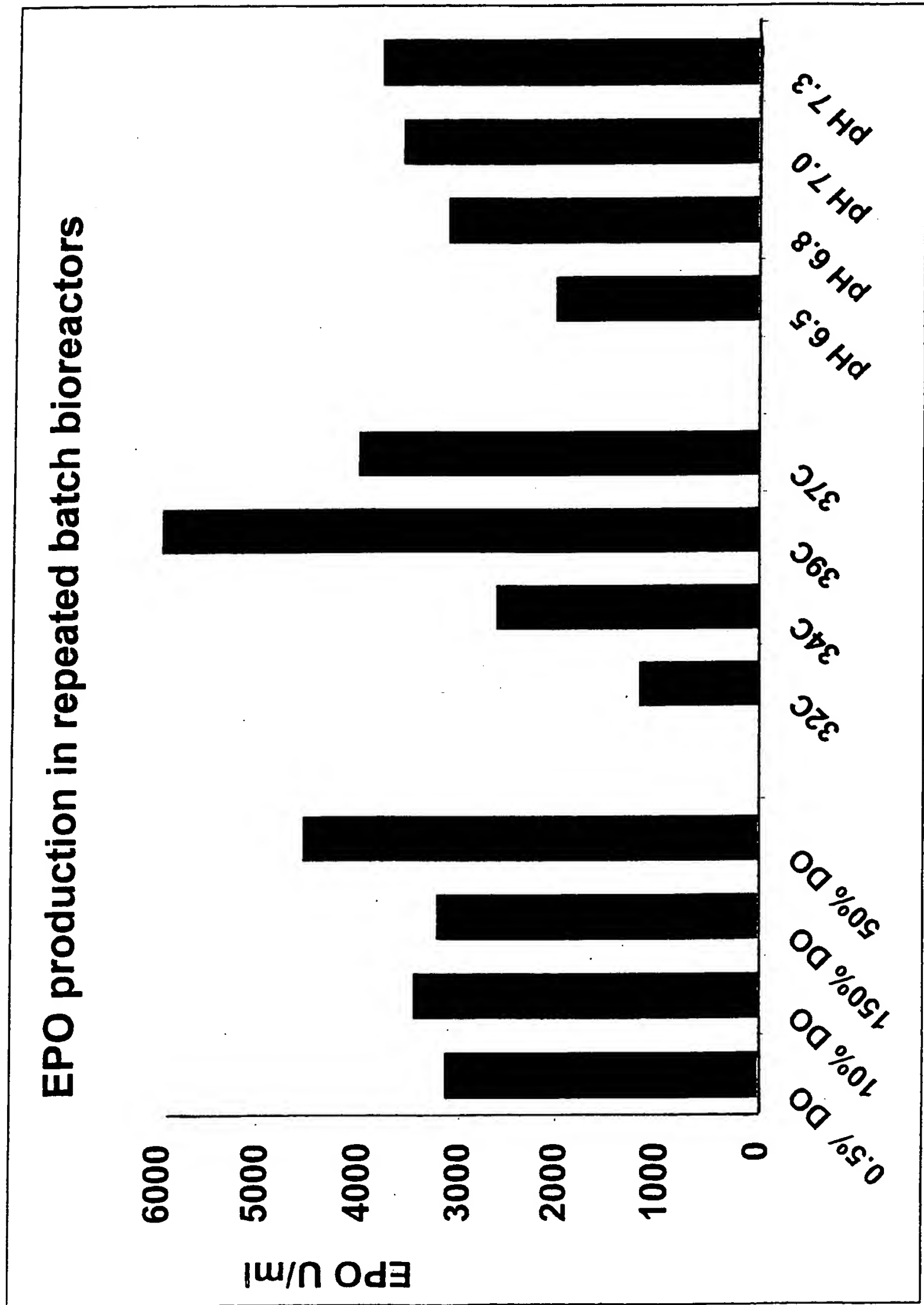


TITLE: RECOMBINANT PROTEIN
RODUCTION IN A HUMAN CELL
Inventor: Hateboer et al.
Serial No.: 09/549,463
Docket No.: 2578-4038.1US

17/27

RECEIVED
FEB 10 2003
TECH CENTER 1600/2900

FIGURE 17





TITLE: RECOMBINANT PROTEIN
PRODUCTION IN A HUMAN CELL

Inventor: Hateboer et al.

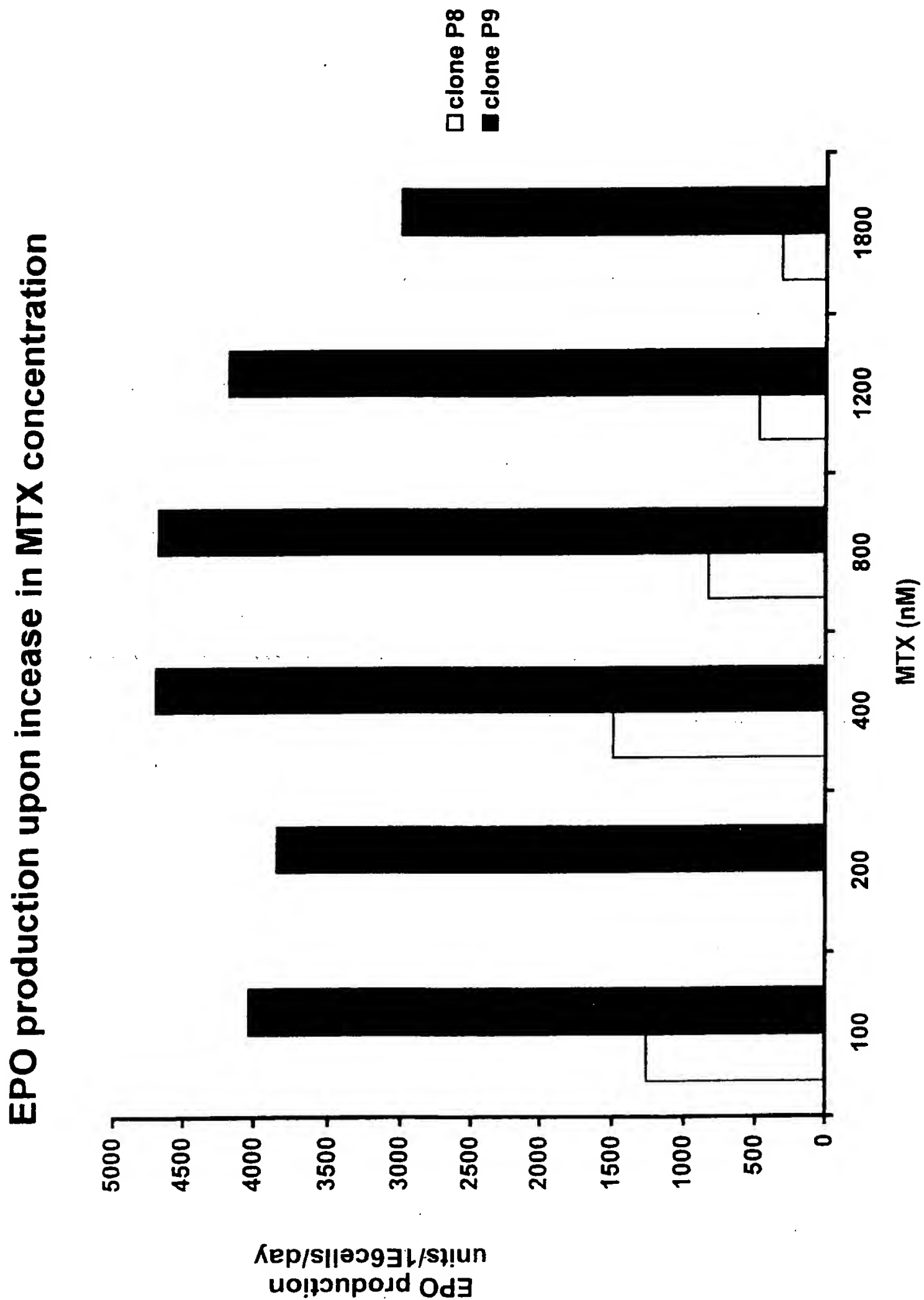
Serial No.: 09/549,463

Docket No.: 2578-4038.1US

18/27

RECEIVED
FEB 19 2003
TECH CENTER 1600/2900

FIGURE 18



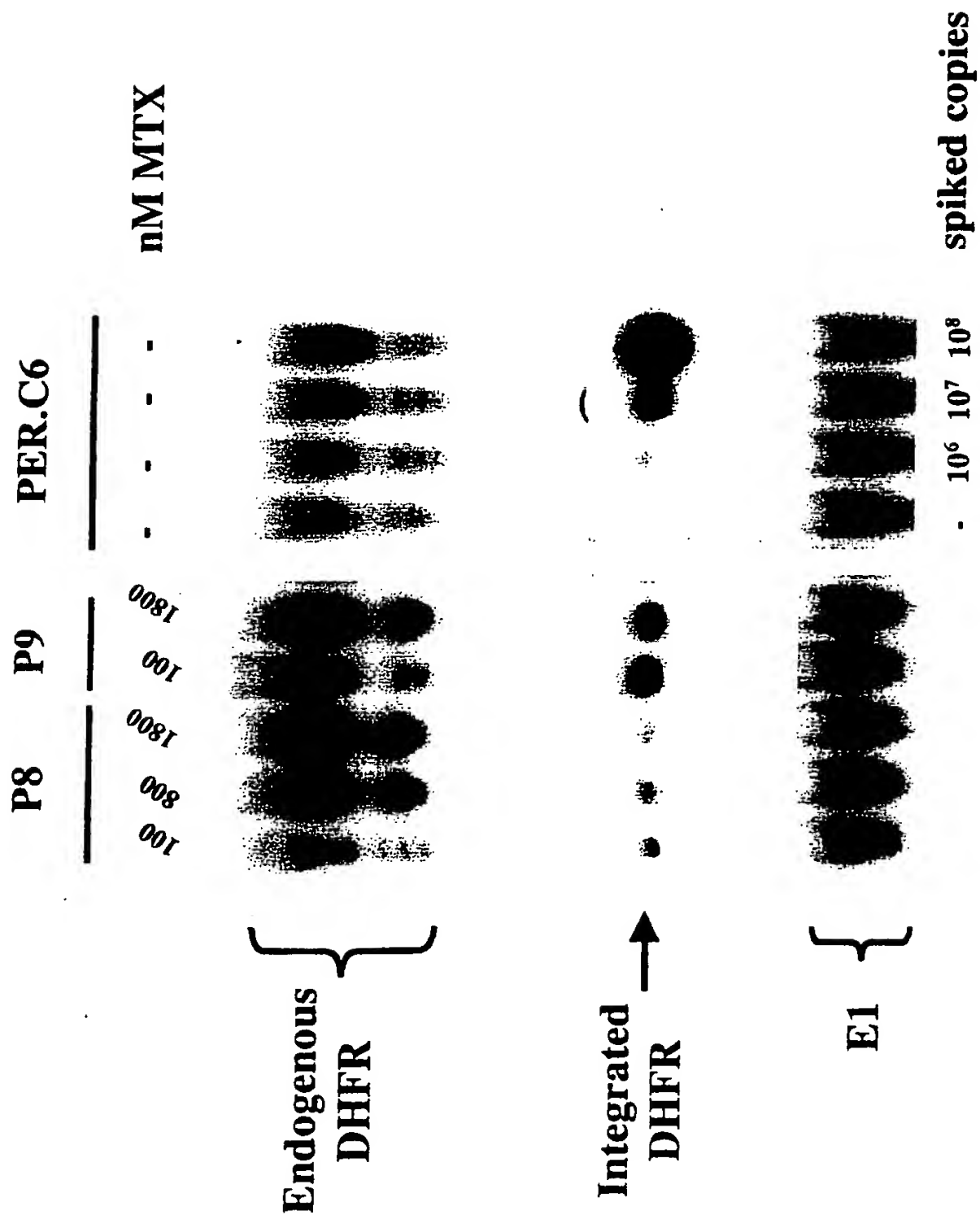


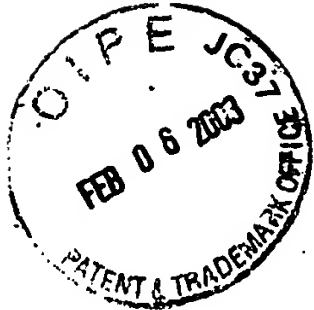
TITLE: RECOMBINANT PROTEIN
PRODUCTION IN A HUMAN CELL
Inventor: Hateboer et al.
Serial No.: 09/549,463
Docket No.: 2578-4038.1US

19/27

RECEIVED
FEB 19 2003
TECH CENTER 1600/2900

FIGURE 19



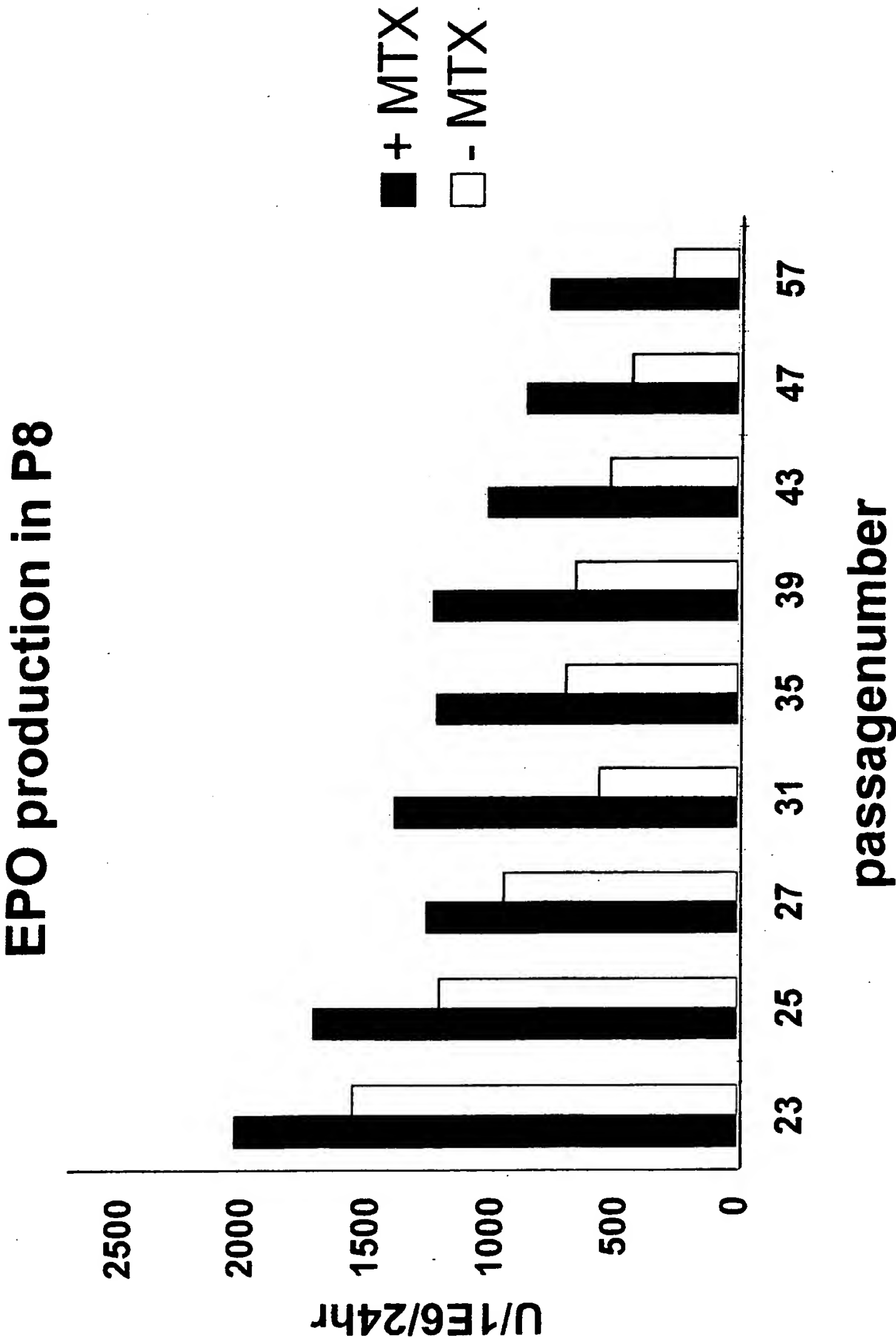


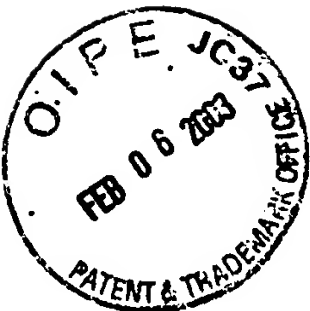
TITLE: RECOMBINANT PROTEIN
PRODUCTION IN A HUMAN CELL
Inventor: Hateboer et al.
Serial No.: 09/549,463
Docket No.: 2578-4038.1US

RECEIVED
FEB 19 2003
TECH CENTER 1600/2900

20/27

FIGURE 20A



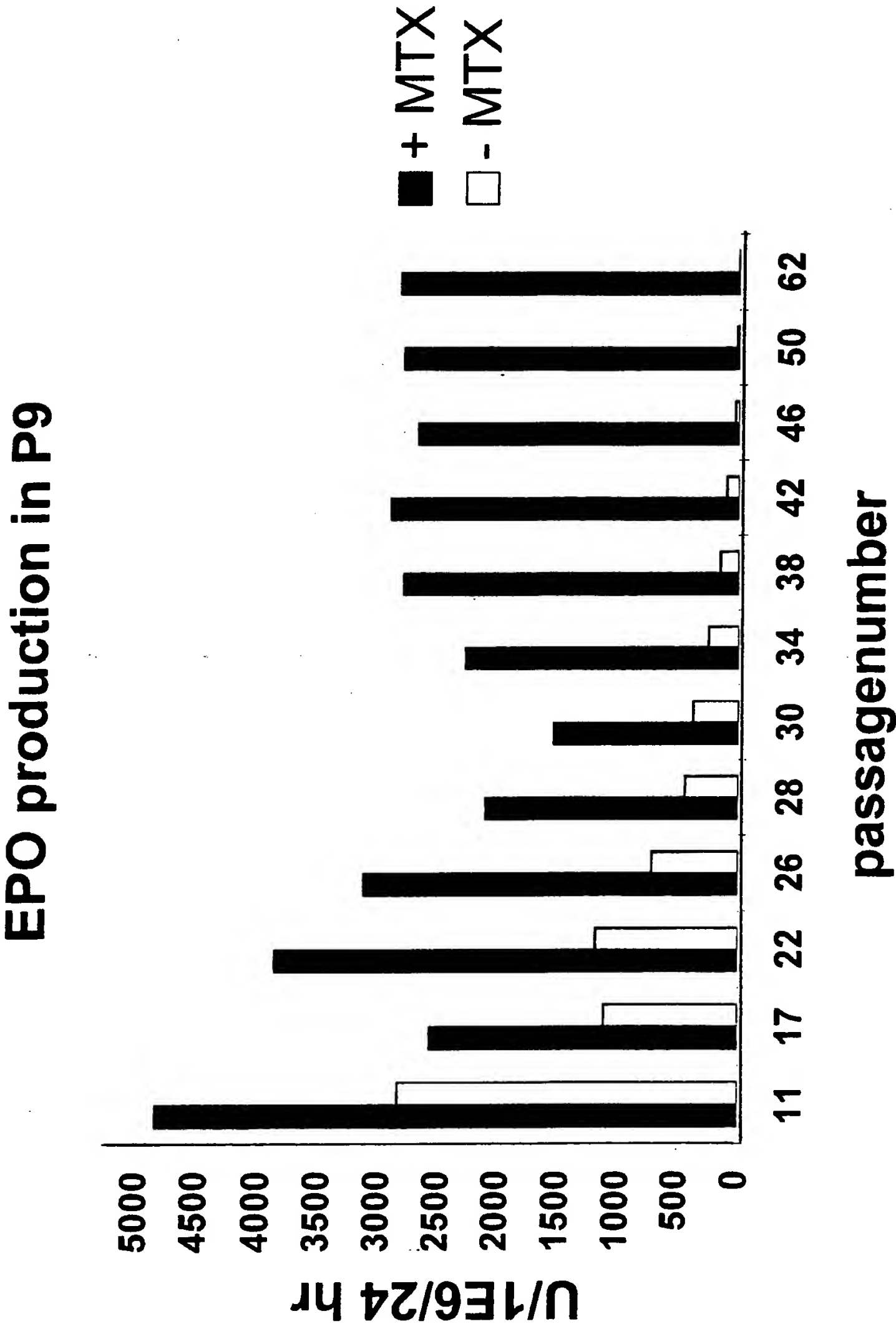


TITLE: RECOMBINANT PROTEIN
PRODUCTION IN A HUMAN CELL
Inventor: Hateboer et al.
Serial No.: 09/549,463
Docket No.: 2578-4038.1US

RECEIVED
FEB 19 2003
TECH CENTER 1800/2900

21/27

FIGURE 20B



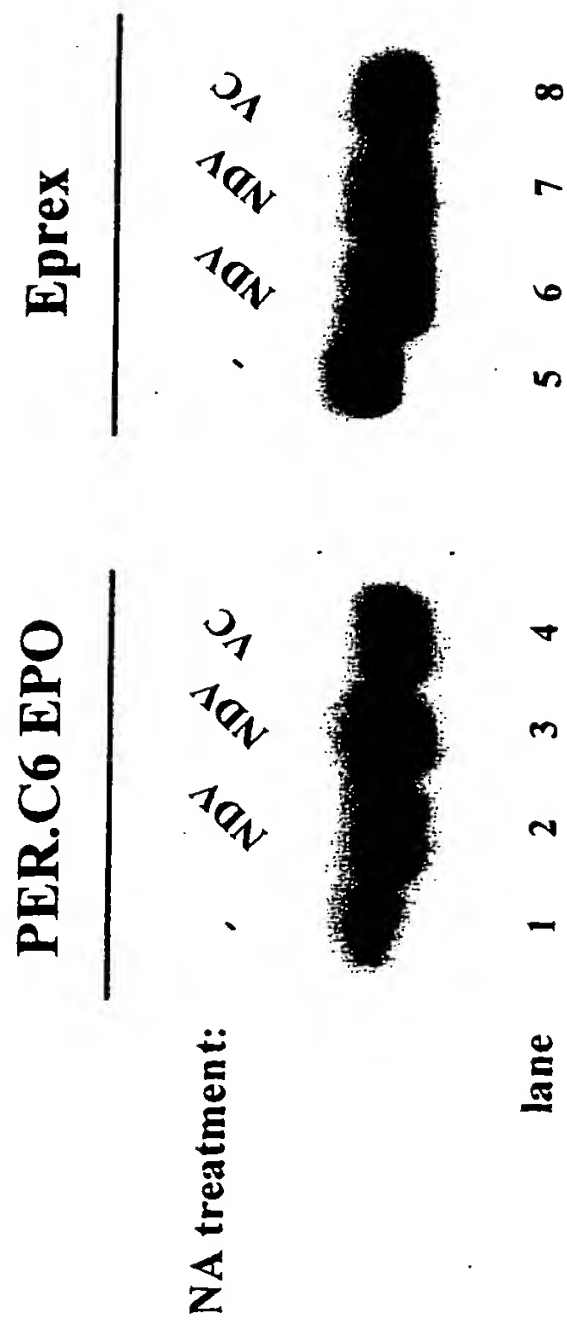


TITLE: RECOMBINANT PROTEIN
PRODUCTION IN A HUMAN CELL
Inventor: Hateboer et al.
Serial No.: 09/549,463
Docket No.: 2578-4038.1US

RECEIVED
FEB 10 2003
TECH CENTER 1600/2900

22/27

FIGURE 21A





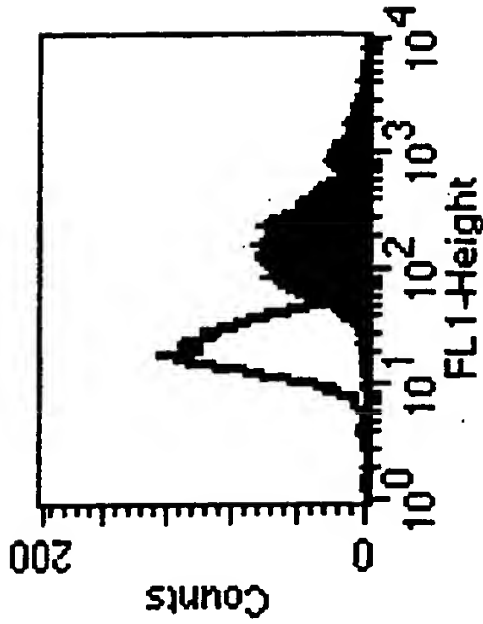
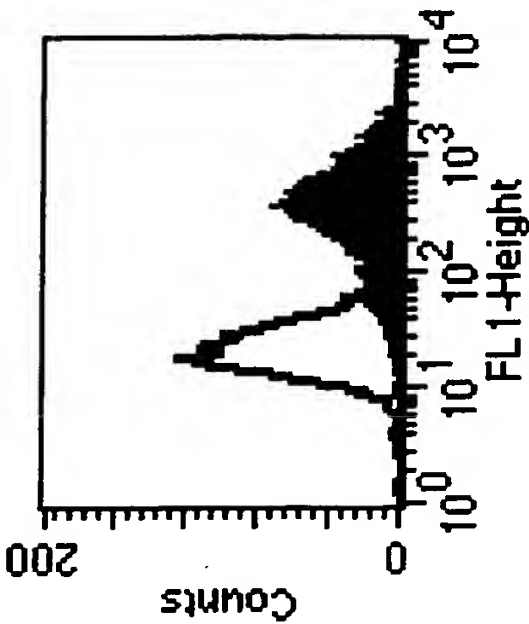
TITLE: RECOMBINANT PROTEIN
PRODUCTION IN A HUMAN CELL
Inventor: Hateboer et al.
Serial No.: 09/549,463
Docket No.: 2578-4038.1US

RECEIVED
FEB 19 2003
TECH CENTER 1800/2900

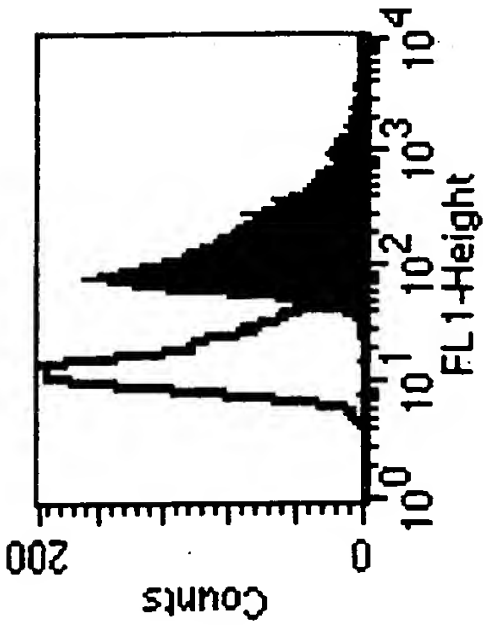
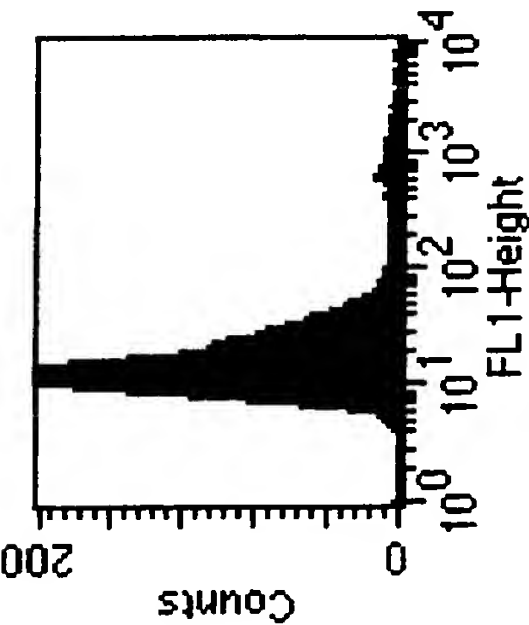
23/27

FIGURE 21B

PER.C6



CHO



Sia2-6Gal

Sia2-3Gal



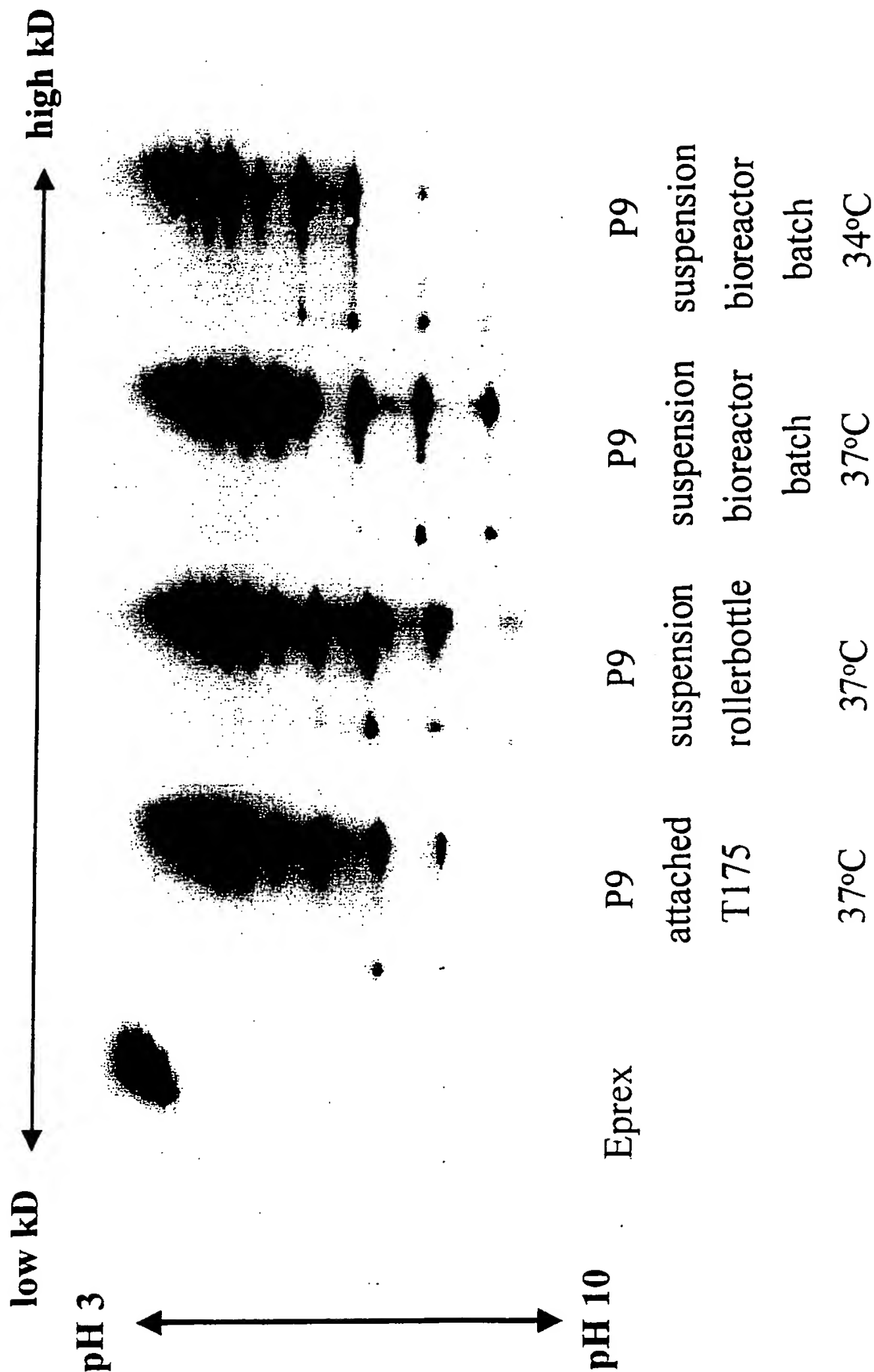
TITLE: RECOMBINANT PROTEIN
PRODUCTION IN A HUMAN CELL
Inventor: Hateboer et al.
Serial No.: 09/549,463
Docket No.: 2578-4038.1US

RECEIVED
FEB 19 2003
TECH CENTER 1600/2900

24/27

FIGURE 22A

2D/western blot on recombinant EPO





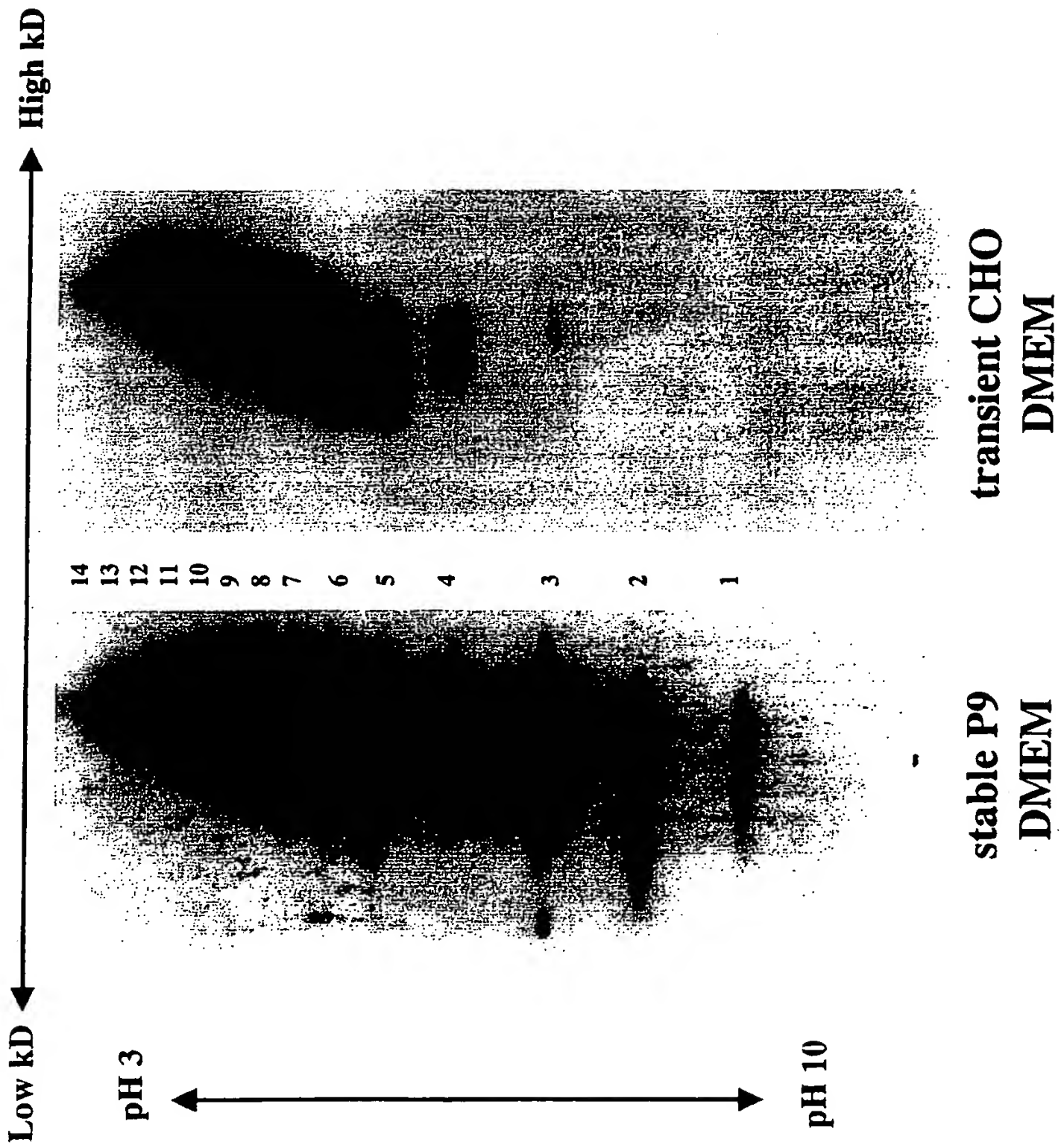
TITLE: RECOMBINANT PROTEIN
PRODUCTION IN A HUMAN CELL
Inventor: Hateboer et al.
Serial No.: 09/549,463
Docket No.: 2578-4038.1US

RECEIVED
FEB 19 2003
TECH CENTER 1600/2900

25/27

FIGURE 22B

2D/western blot on recombinant EPO

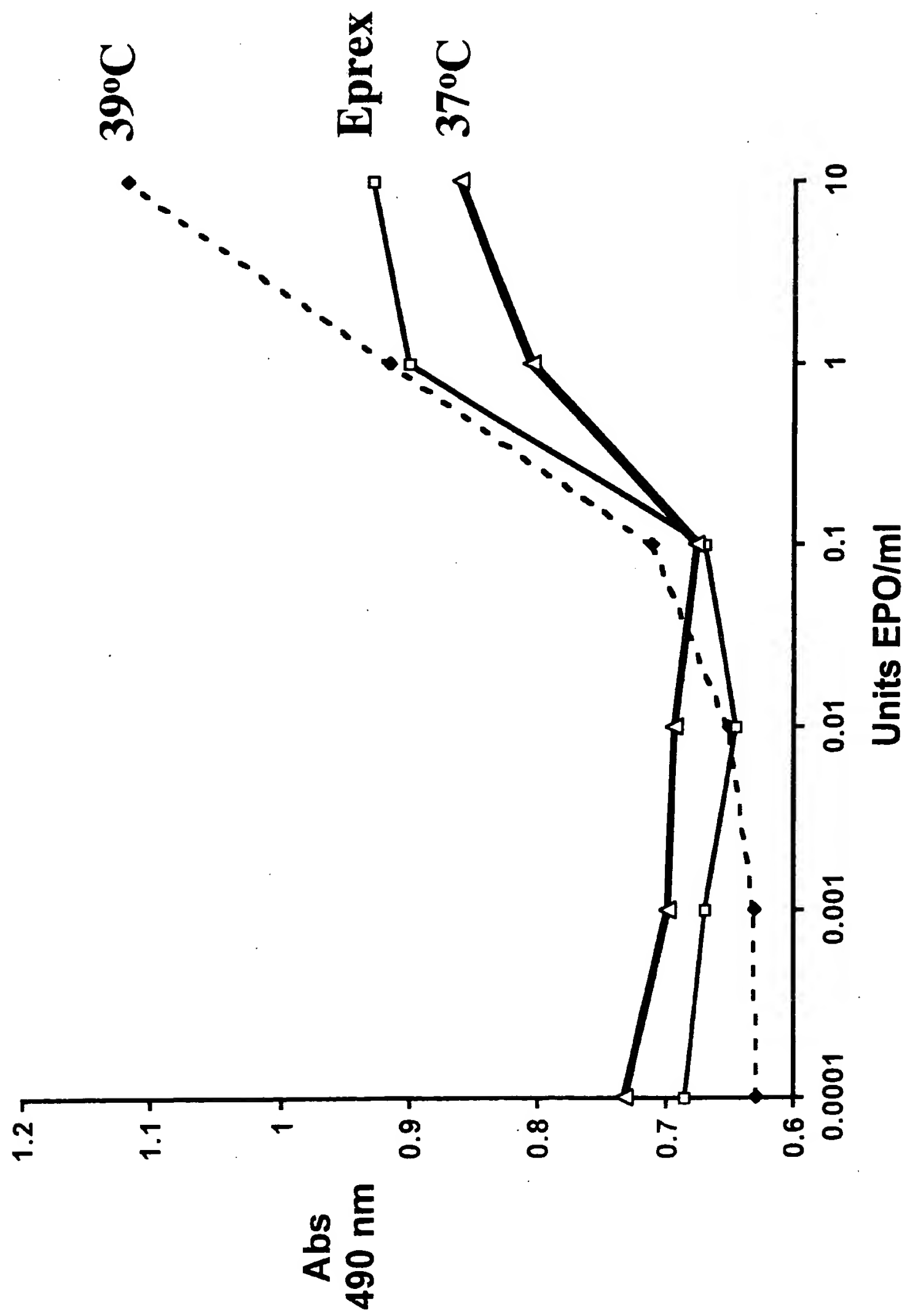




TITLE: RECOMBINANT PROTEIN
PRODUCTION IN A HUMAN CELL
Inventor: Hateboer et al.
Serial No.: 09/549,463
Docket No.: 2578-4038.1US

RECEIVED
FEB 10 2003
TECH CENTER 1600/2900

FIGURE 23





TITLE: RECOMBINANT PROTEIN
PRODUCTION IN A HUMAN CELL
Inventor: Hateboer et al.
Serial No.: 09/549,463
Docket No.: 2578-4038.1US

RECEIVED
FEB 19 2003
TECH CENTER 1600/2900

27/27

FIGURE 24

Western blot of transient UBS-54 expression in PER.C6

